

## A new species of a sedge moth, *Glyphipterix* Hübner (Lepidoptera, Glyphipterigidae), from Japan

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**Abstract** A new sedge moth, *Glyphipterix mikadonis*, is described from the gardens of the Imperial Palace and the Akasaka Imperial Gardens, Tokyo, Japan, with diagnosis of male and female genitalia.

**Key words** *Glyphipterix mikadonis* sp. nov., Glyphipterigidae, taxonomy, fauna, Imperial Palace, Japan.

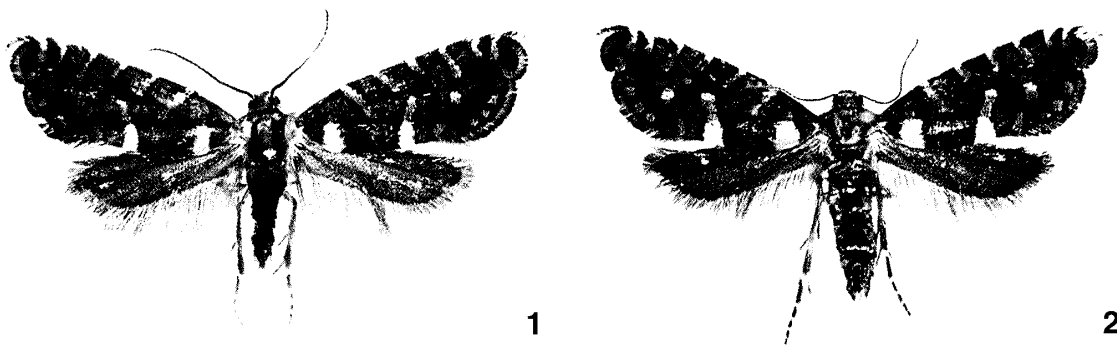
The diurnal sedge moths, genus *Glyphipterix* Hübner, 1825, are represented by 54 species in the Palaearctic Region (Diakonoff, 1986). Twenty-one species of this sedge moth genus have hitherto been recorded from Japan (Arita, 1987). A new and unfamiliar sedge moth species was collected in the gardens of the Imperial Palace and the Akasaka Imperial Gardens, Tokyo, during surveys of the moth faunas there conducted by the National Science Museum, Tokyo (Owada *et al.*, 2000, 2005). This species is added to the Japanese fauna and described as new to science.

We should like to express hearty gratitude to His Majesty the Emperor of Japan for giving his auspices to the scientific investigation of the Imperial Palace and the Akasaka Imperial Gardens, Tokyo, Japan. We wish to express hearty thanks also to Dr Utsugi Jinbo, the National Science Museum, Tokyo, and Mr Yasunori Kishida and the late Masumi Ikeda, Tokyo, for their helpful support during the surveys.

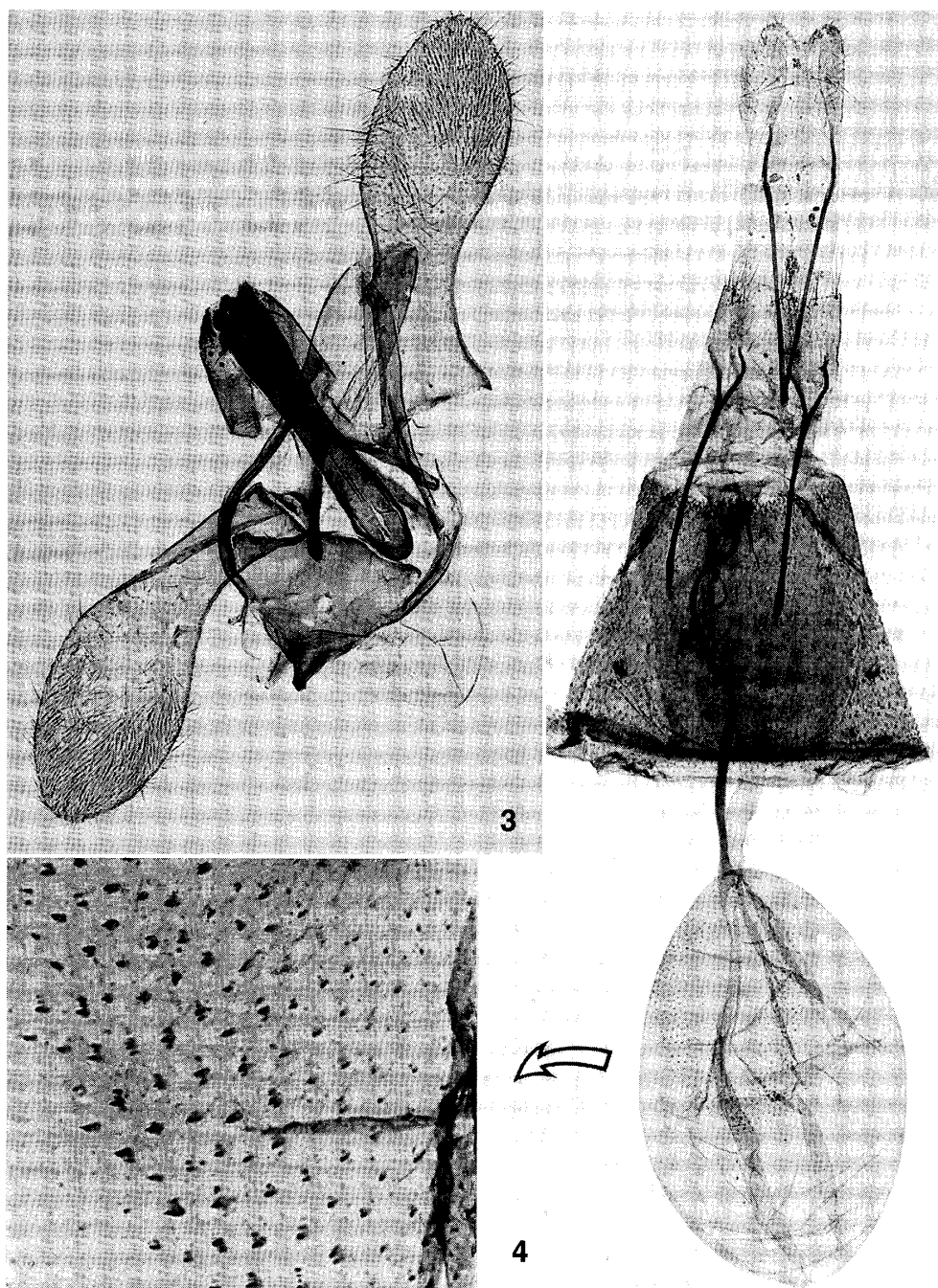
### *Glyphipterix mikadonis* sp. nov. (Figs 1–4)

*Glyphipterix* sp.: Owada *et al.*, 2000: 122, fig. 12; Owada *et al.*, 2005: 70.

**Description.** Male (holotype) (Fig. 1). Alar expanse 12.5 mm. Head glossy dark fuscous.



Figs 1–2. *Glyphipterix mikadonis* sp. nov. 1. Male, holotype. 2. Female, paratype.



Figs 3–4. Genitalia of *Glyphipterix mikadonis* sp. nov. 3. Male genitalia, genitalia slide no. NSMT 2628 ♂, paratype. 4. Female genitalia, genitalia slide no. NSMT 2629 ♀, paratype.

Antenna fuscous. Labial palpus short, drooping; basal segment grey-fuscous; median segment dull white, with dark fuscous basal and subapical bands; terminal segment dull white, with dark fuscous basal and median bands, and apex dark fuscous. Thorax glossy dark fuscous, apex with a white spot. Abdomen glossy dark fuscous. Forewing narrow, dilated; costa almost straight; apex rounded; termen curved, indented below apex; dark fuscous, with apex blackish; six short white costal streaks, terminating in a leaden-metallic line, the 1st longest from  $1/4$ , the 2nd from  $2/5$ , the 3rd a little beyond middle, the 4th from  $2/3$ , the outer two short and approximated; two rather long triangular creamy yellow blotches on

dorsum, one near base, reaching 3/5 across wing, and the other a little before middle, reaching the centre of the wing, terminating in a leaden-metallic line; a purplish-metallic dot just below apex; a rounded black blotch along termen to tornus, containing three purplish-metallic dots; two purplish-metallic dots, one before the tornus, the other in the middle of the disc; cilia grey, with basal half dark fuscous; a dark fuscous hook above apex. Hindwing fuscous; cilia grey.

Male genitalia (Fig. 3). Tegumen moderately long and rather slender. Tuba analis rather long. Vinculum broad, triangular. Saccus remarkably short. Valva oval, narrowed on basal half, evenly fine-bristled throughout except towards base. Anellus a large rotundate sac. Aedeagus long and slender, apical 1/3 densely spined, apex bifurcate, cornutus a dark slender tube.

Female (Fig. 2, paratype). Alar expanse 10.5–12.0 mm. Very similar to male.

Female genitalia (Fig. 4). Papilla analis long and slender. Postapophysis long and thin, longer than antapophysis. Ostium bursae moderate in size, cup-shaped. Antrum not defined. Ductus bursae long and very thin. Corpus bursae large, lanceolate-oblong. Signum absent.

Individual variability. This new species varies in the size of the two rather long triangular creamy blotches on the dorsum of the forewing in both sexes. Additionally, it is slightly variable in individual size: alar expanse 10.5–12.5 mm.

Host-plant. Unknown.

Bionomics and Habitat. Adult moths were netted at the end of May and the beginning of June in small patches of bushes in the Gardens of the Imperial Palace and the Akasaka Imperial Gardens, Tokyo.

Specimens examined. Holotype (Fig. 1). ♂, Fukiage-gyoen, Imperial Palace, Tokyo, Japan, 24. V. 2002, Y. Arita, M. Ikeda & U. Jinbo leg., deposited in the National Science Museum, Tokyo. Paratypes. 1 ♀, 27. V. 1999, Fukiage-gyoen, Imperial Palace, Tokyo, Japan, Y. Arita & M. Ikeda leg.; 5 ♂ 1 ♀, 25. V. 2001, Kajuen, Fukiage-gyoen, Imperial Palace, Tokyo, Japan, U. Jinbo leg.; 1 ♂ 2 ♀, 6. VI. 2002, the same locality, Y. Kishida & U. Jinbo leg.; 1 ♂, 25. V. 2001, Kanbakutei, Fukiage-gyoen, Imperial Palace, Tokyo, Japan, U. Jinbo leg.; 16 ♂ 8 ♀, 24. V. 2002, the same locality and collector as the holotype; 2 ♂, 3. VI. 2004, the same locality as the holotype, Y. Arita & M. Owada leg.; 5 ♂ 8 ♀, 23. V. 2002, Akasaka Imperial Gardens, Tokyo, Y. Arita, M. Ikeda & U. Jinbo leg., all deposited in the National Science Museum, Tokyo.

Remarks. This new species is unique in having two rather long triangular creamy yellow blotches on the dorsum of the forewings, separating it from the other *Glyphipterix* species in Japan.

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## 摘 要

日本産ホソハマキモドキ属 (鱗翅目, ホソハマキモドキガ科) の一新種 (有田 豊・大和田 守)

ホソハマキモドキガ科は旧北区から 54 種類が記録されている (Diakonoff, 1986). また本邦からは 21 種類産することが知られている (Arita, 1987). 国立科学博物館が行っている皇居の蛾類調査でこの昼飛性のホソハマキモドキガ科の未記載種の一種が採集された (Owada *et al.*, 2000). またこの未記載種は赤坂御用地から見出された (Owada *et al.*, 2005). 精査の結果この種類は今までに知られていない新種と認められた.

*Glyphipterix mikadonis* sp. nov. トウキョウホソハマキモドキ (新称) (Figs 1-4)

ホソハマキモドキとしては中型の種類で, 前翅後縁上の薄い黄色の 2 紋が特徴的で, 容易にほかのホソハマキモドキと区別される.

皇居吹上御苑と赤坂御用地のやや開けた草地で 5 月下旬から 6 月上旬の日中に飛翔しているものや草地のスィーピングによって得られた.

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